



## Water Quality, Seagrass, and Coral Projects



The Water Quality Monitoring Project for the Florida Keys National Marine Sanctuary is part of the Sanctuary's Water Quality Protection Program. The goal of this large-scale project is to assemble a holistic view of the broad physical, chemical, and

biological interactions occurring in south Florida's surface waters. This project includes data collected from 154 fixed stations within the Sanctuary. Field parameters measured at each station include salinity, temperature, dissolved oxygen, turbidity, relative fluorescence, and light attenuation. Water samples collected from each site are analyzed to provide water chemistry data, including nutrient concentrations. Phytoplankton biomass in the water column is measured by analyzing collected water samples for chlorophyll-a levels. For more information on this project, visit: <http://serc.fiu.edu/wqmnetwork>.

Project Investigators: Ronald D. Jones and Joseph N. Boyer, Florida International University.



Photo: FIU

The objective of seagrass monitoring is to measure the status and trends of seagrass communities within the Florida Keys National Marine Sanctuary. The benthic surveys conducted as part of this project have documented the distribution and importance of seagrasses within the Sanctuary. The seagrass bed that carpets 80% of the Sanctuary is part of the largest documented contiguous seagrass bed on earth. These extensive meadows are vital for the ecological functioning of all the marine ecosystems in south Florida. For more information about this project, visit: <http://www.fiu.edu/~seagrass>.

Project Investigators: James W. Fourqurean, Florida International University; Michael J. Durako, University of North Carolina at Wilmington; Joseph C. Zeiman, University of Virginia.



Photo: FMRI

The Coral Reef Monitoring Project (CRMP) uses Sanctuary-wide spatial coverage, repeated sampling, and statistically valid findings to document status and trends of coral communities. Stony coral species richness and disease presence are documented at each station. Analyses of video transect images yield percent cover for stony coral and other types of bottom habitat. Between 1996 and 2000, the CRMP reported a 37% reduction in stony coral cover Sanctuary-wide. Project results assist managers in understanding, protecting, and restoring the living marine resources of the Sanctuary. For more information about this project, visit: <http://www.floridamarine.org/>.

Project Investigators: Walter C. Jaap and Jennifer Wheaton, Florida Fish and Wildlife Conservation Commission/Florida Marine Research Institute; James W. Porter, University of Virginia.

*Note:* This article appeared in the Spring 2002 issue of the newsletter of the Florida Keys National Marine Sanctuary, **Sounding Line**. For more information, visit: [floridakeys.noaa.gov](http://floridakeys.noaa.gov).